

ABSTRACT

2 A vehicle surroundings monitoring apparatus comprises
3 image solid object detecting means for detecting image solid
4 objects based on image information outputted from a CCD camera,
5 millimeter wave solid object detecting means for detecting
6 millimeter wave solid objects based on signals outputted from
7 a millimeter wave radar, fusion solid object establishing means
8 for establishing fusion solid objects composed of single image
9 solid objects, single millimeter wave solid objects and a
10 combination of the image solid objects and the millimeter wave
11 solid objects by fusing the image solid objects and the millimeter
12 wave solid objects, first reliability judging means for judging
13 a degree of reliability of the fusion solid objects based on a
14 detecting situation of the respective fusion solid objects by
15 the image solid object detecting means, second reliability judging
16 means for judging a degree of reliability of the fusion solid
17 objects based on a detecting situation of the respective fusion
18 solid objects by the millimeter wave solid object detecting means
19 and preceding vehicle selecting means for selecting a preceding
20 vehicle from the fusion solid objects when it is judged that the
21 fusion solid objects have a specified level of reliability
22 according to either of the first reliability judging means and
23 the second reliability judging means.

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